

Notice of Allowability

Application No.

10/782,168

Applicant(s)

KIM ET AL.

Examiner

Art Unit

Prabodh M. Dharja

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02-06-2007.
2. ☒ The allowed claim(s) is/are 1-3, 7-11, 13-20 and renumbered as 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Art Unit: 2629

1. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. Receipt is acknowledged of papers submitted on 01-23-2007 under amendments, which have been placed of record in the file. Claims 1-3, 7-11 and 13-20 are pending in this action. Claims 4-6 and 12 are cancelled.

Response to Amendment

2. The amendment and new claims filed on 01-23-2007 does not introduce new matter into the disclosure. The added material, which is supported by the original disclosure.

Applicant has amended drawings per objection and therefore objection to drawings are withdrawn.

3. Applicant has amended Claims 1-3,7-11,14-18 and added new claims 19,20 to overcome prior art teaching. Applicant has added new amendments limitations of master-slave circuitry used as a multiplexer; multiplexing RGB to over come prior art teaching. Applicant's arguments, see Remark, filed 01-23-07, with respect to Claims 1, and 9 regarding "patentable subject matter is (e.g. "source driving circuit" and an "article of manufacture") including the novel combination of features of the disclosed multiplexing, latch circuits. The exemplary multiplexing-latch circuits MLAI and MLA2 illustrated in Figure 5 differ significantly and patentably from the combination of distinct latching and multiplexing circuits illustrated in applicant admitted prior art. Similarly, each of multiplexing-latch circuits MLA1 and MLA2 illustrated in Figure 5 contains less number of transistors; thus, the circuit of Figure 5 can be implemented on a chip having less area and smaller dimensions and may consume less electrical

Art Unit: 2629

power during its operation.” have been fully considered, searched and are persuasive as they do overcome prior art rejection. Applicant has agreed to authorize to do examiner amendments. The persuasive arguments filed on 01-23-2007; amending independent claims 1, 9 with allowable limitations and examiner amendments are sufficient to overcome the prior art rejection; and put application number 10782168 in condition for allowance.

EXAMINER’S AMENDMENT

1. An examiner’s amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Applicant’s representative Frank Chau gave authorization for this examiner’s amendment in a telephone interview on March 7, 2007.

In the Claims

On page 4,

Claim 3, Line 5, after words “G and B color signals” delete, “;.” and add “.”

On page 5,

Claim 9, Line 17, after word “enabled” delete, “;.” and add “.”

On page 6,

Claim 11, Line 3, after words “two inverters” delete, “; and wherein” and add “.”

On page 7,

Art Unit: 2629

Claim 18, Line 5, before word “wherein” delete, “?”.

Allowable Subject Matter

4. Claims 1-3, 7-11 and 13-20 are allowed.

5. The following is an examiner’s statement of reasons for allowance:

Applicant’s arguments filed on 01-23-2007 are convincing. As argued by applicant in remarks under claim rejection page 9, 2nd paragraph from the bottom, page 10 last two paragraphs, and page 11, paragraphs 1 and 3 the prior art of Kanoh et al. (US 6,806,859 B1) in view of Goto et al. (US 2004/0196231 A1) and Zavracky et al. (US 2002/0030649) fails to recite or disclose the uniquely distinct features represented by underlined bold claim below;

wherein the multiplexing latch circuit comprises a plurality of inverters and transmission gates configured to form a first latch including a gate unit, and a second latch, wherein the gate unit includes first and second, transmission gates, wherein the first latch includes the gate unit, and first and second inverters, wherein the second latch includes third and fourth inverters, wherein the output node of the first latch is connected to the input node of the third inverter through the fourth transmission gate, and the first and second transmission gates are directly connected to the input node of the first inverter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2629

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Response to Arguments

6. Applicant's arguments, see remark, filed 01-23-2007, with respect to 35 USC 112 first paragraph rejection have been fully considered and are persuasive. The rejection under 35 USC 112 first paragraph has been withdrawn.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

8. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Application/Control Number: 10/782,168

Page 6

Art Unit: 2629

Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2629

March 7, 2007



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600